

WO 01/34796

PCT/IL00/00736

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 <213> Homo sapiens

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 ttaccctctc tgggcctcat ttgtctaatac ataataatta acgctgatac catgatataa 180
 atctgtacag catttcaactg cttgattccc taactgccct gtgagataag cgtaaaggct 240
 cagagacagt ggcattgcccc gtgttgacaca gtaagtgtgt ggtaaagccg agattcaaac 300
 tcagaccttc tggcccttg cctaggagag catgccaggt tgtctagcag attctctttt 360
 gcctgagtggt cccagatgac atctctttta gagctagaaa gaaggagaaa tgagacaggg 420
 tctttgggct ggagcctcct gggactaaca tggcactggg cggtttgcca ggcccagaca 480
 tgttctgcct tttccatggg aagagatact cccccggcga gagctggcac ccctacttgg 540
 agccacaagg cctgatgtac tgccctgcgt gtacctgctc agagggcgcc catgtgagtt 600
 gttaccgcct ccaactgtccg cctgtccact gcccccagcc tgtgacggag ccacagcaat 660
 gctgtcccaa gtgtgtggaa cctcacactc cctctggact ccgggccccca ccaaagtcct 720
 gccagcacia cgggaccatg taccaacacg gagagatctt cagtgcccat gagctgttcc 780
 cctcccgctt gcccaaccag tgtgtcctct gcagctgcac agagggccag atctactgcy 840
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 gccaaagcctg caaagatgag gcaagtgagc aatcggatga agaggacagt gtgcagtcgc 960
 tccatgggggt gagacatcct caggatccat gttccagtga tgctgggaga aagagaggcc 1020
 cgggcacccc agccccact ggcctcagcg cccctctgag cttcatccct cgccacttca 1080
 gacccaaggg agcaggcagc acaactgtca agatcgctcct gaaggagaaa cataagaaag 1140
 aggacaaaagc agaccctggc cacagtgaga tcagttctac caggtgtccc aaggcaccgg 1200
 gccgggtcct cgtccacaca tcgggtatccc caagcccaga caacctgcgt cgctttgccc 1260
 tggaacacga ggcctcggac ttggtggaga tctacctctg gaagctggta aaagatgagg 1320
 aaactgaggc tcagagaggt gaagtacctg gcccaaggcc acacagccag aatcttccac 1380
 ttgactcaga tcaagaaagt caggaagcaa gacttccaga aagaggcaca gcacttccga 1440
 ctgctcgctg gccccacga aggtcactgg aacgtcttcc tagcccagac cctggagctg 1500
 aaggtcacgg ccagtccaga caaagtgacc aagacataac aaagacctaa cagttgcaga 1560
 tatgagctgt ataattgttg ttattatata ttaataaata agaagttgca taaccatcaa 1620
 aa 1622

<210> 10
 <211> 1567
 <212> DNA
 <213> Homo sapiens

<400> 10
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 gagactgggtg ctgtcatcgc tgccctgggtga ctgacttgct gtgtggccct caggtgtaac 120
 ttaccctctc tgggcctcat ttgtctaatac ataataatta acgctgatac catgatataa 180
 atctgtacag catttcaactg cttgattccc taactgccct gtgagataag cgtaaaggct 240
 cagagacagt ggcattgcccc gtgttgacaca gtaagtgtgt ggtaaagccg agattcaaac 300
 tcagaccttc tggcccttg cctaggagag catgccaggt tgtctagcag attctctttt 360
 gcctgagtggt cccagatgac atctctttta gagctagaaa gaaggagaaa tgagacaggg 420
 tctttgggct ggagcctcct gggactaaca tggcactggg cggtttgcca ggcccagaca 480
 tgttctgcct tttccatggg aagagatact cccccggcga gagctggcac ccctacttgg 540
 agccacaagg cctgatgtac tgccctgcgt gtacctgctc agagggcgcc catgtgagtt 600
 gttaccgcct ccaactgtccg cctgtccact gcccccagcc tgtgacggag ccacagcaat 660
 gctgtcccaa gtgtgtggaa cctcacactc cctctggact ccgggccccca ccaaagtcct 720
 gccagcacia cgggaccatg taccaacacg gagagatctt cagtgcccat gagctgttcc 780
 cctcccgctt gcccaaccag tgtgtcctct gcagctgcac agagggccag atctactgcy 840
 gcctcacaac ctgccccgaa ccaggctgcc cagcaccctt cccgctgcca gactcctgct 900

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gccaaagcctg caaagatgag gcaagtgagc aatcggatga agaggacagt gtgcagtcgc 960
tccatgggggt gagacatcct caggatccat gtccagtgga tgctgggaga aagagaggcc 1020
cgggcacccc agccccact ggccctcagcg cccctctgag ctccatccct cgccacttca 1080
gacccaaggg agcaggcagc acaactgtca agatcgtcct gaaggagaaa cataagaaaag 1140
aggacaaaagc agaccctggc cacagtgaga tcagttctac caggtgtccc aaggcaccgg 1200
gccgggtcct cgtccacaca tcgggtatccc caagcccaga caacctgcgt cgctttgccc 1260
tggaacacga ggccctcggac ttgggtggaga tctacctctg gaagctggta aaaggaatct 1320
tccacttgac tcagatcaag aaagtcagga agcaagactt ccagaaagag gcacagcact 1380
tccgactgct cgctggcccc caggaaggtc actggaacgt ctccctagcc cagaccctgg 1440
agctgaaggt cagggccagt ccagacaaaag tgaccaagac ataacaaaaga cctaacagtt 1500
gcagatatga gctgtataat tgtgtttatt atatattaat aaataagaag ttgcataacc 1560
atcaaaa 1567

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<210> 11
 <211> 1202
 <212> DNA
 <213> Mouse

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<400> 11
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aagccctgga ggctggcttg ccaaatecct gtcagtgtnt ttattgatta gtctgagaat 120
atcttagacc tcaccacaaa gggtctgtgt ggagcctgtg ctctctgtct gtctgtctgt 180
ctgtctgtct gtctgtctgt ctgctgtcct ctctctgtct gtctccgtct gtctctgtct 240
ctctgtctgt ctctgtctgt ctctctctct ctgtctctct ctgtgtctct gtctctgtct 300
ctgtctctct ctctctctca gaagtcctct agccttctct agcaggcgtc tcatgcagcc 360
tggttggtgt tcccagctgt ggccatcccc acagacagct ccacatcctg cttgctgttc 420
gcagagacat tcccaggatc catgctcgga gaggagaggc cccagcacgc cagccccac 480
cagcctcagc tcccctctgg gcttcacccn tcgccacttc cagtcagtag gaatgggag 540
cacaaccatc aagattatct tgaaggagaa acataaaaaa gcttgcacac acaatgggaa 600
gacatactcc catggggagg tgtggcacc cactgtgctc tcctttggcc ccatgcccctg 660
catcctgtgc acatgtattg atggctacca ggaactgccac cgtgtgacct gccccaccca 720
atatccctgc agtcaaccca agaaagtggc tgggaagtgc tgcaagatct gccagagga 780
cgaggcgga gatgaccaca gtgaggtcat ttccaccggg tgtcccaagg taccaggcca 840
gttccagggtg tacacgttg catctccaag cccagacagc ctacacggct ttgtcctgga 900
gcatgaagcc tctgaccagg tagagatgta catttggaag ctggtgaaag gaatttacca 960
cttggttcag atcaagagag tcaggaagca agatttccag aaagagggtc agaacttccg 1020
gctgctcacc ggcacccatg aaggttactg gaccgttttc ctagcccaga ttccagagct 1080
gaaagttaca gccagcccag acaaagtgc caagacatta tagcaaggac ctaaaagatt 1140
gcagatacga gttttattgg tttgtttatt atatattaat aaagaagtcg cattaccctt 1200
tc 1202

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<210> 12
 <211> 398
 <212> PRT
 <213> Homo sapiens

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<400> 12
Arg Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg Cys Thr Cys Ser Glu
  1           5           10           15

Gly Ala His Val Ser Cys Tyr Arg Leu His Cys Pro Pro Val His Cys
          20           25           30

Pro Gln Pro Val Thr Glu Pro Gln Gln Cys Cys Pro Lys Cys Val Glu
          35           40           45

Pro His Thr Pro Ser Gly Leu Arg Ala Pro Pro Lys Ser Cys Gln His
          50           55           60

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Asn Gly Thr Met Tyr Gln His Gly Glu Ile Phe Ser Ala His Glu Leu
 65 70 75 80
 Phe Pro Ser Arg Leu Pro Asn Gln Cys Val Leu Cys Ser Cys Thr Glu
 85 90 95
 Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro
 100 105 110
 Ala Pro Leu Pro Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu
 115 120 125
 Ala Ser Glu Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly
 130 135 140
 Val Arg His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg
 145 150 155 160
 Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe
 165 170 175
 Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val Lys
 180 185 190
 Ile Val Leu Lys Glu Lys His Xaa Lys Ala Cys Val His Gly Gly Lys
 195 200 205
 Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg Ala Phe Gly
 210 215 220
 Pro Cys Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly Arg Gln Asp Cys
 225 230 235 240
 Gln Arg Val Thr Cys Pro Thr Lys Tyr Pro Cys Arg His Pro Glu Lys
 245 250 255
 Val Ala Gly Lys Cys Cys Lys Ile Cys Pro Glu Asp Lys Ala Asp Pro
 260 265 270
 Gly His Ser Glu Ile Ser Ser Thr Arg Cys Pro Lys Ala Pro Gly Arg
 275 280 285
 Val Leu Val His Thr Ser Val Ser Pro Ser Pro Asp Asn Leu Arg Arg
 290 295 300
 Phe Ala Leu Glu His Glu Ala Ser Asp Leu Val Glu Ile Tyr Leu Trp
 305 310 315 320
 Lys Leu Val Lys Asp Glu Glu Thr Glu Ala Gln Arg Gly Glu Val Pro
 325 330 335
 Gly Pro Arg Pro His Ser Gln Asn Phe His Leu Thr Gln Ile Lys Lys
 340 345 350
 Val Arg Lys Gln Asp Phe Gln Lys Glu Ala Gln His Phe Arg Leu Leu
 355 360 365
 Ala Gly Pro His Glu Gly His Trp Asn Val Phe Leu Ala Gln Thr Leu
 370 375 380
 Glu Leu Lys Val Thr Ala Ser Pro Asp Lys Val Thr Lys Thr

385

390

395

<210> 13
 <211> 539
 <212> PRT
 <213> Homo sapiens

<400> 13

Ser Pro Leu Pro Ser Ala Gly Pro Ser Phe Val Ser Pro Ser Leu Pro
 1 5 10 15

Pro Phe Pro Ala Phe Ser Phe His Leu Ser Leu Leu Pro Thr Leu Asp
 20 25 30

Leu Pro Ser Cys Pro Pro Phe Leu Pro Thr Ala Ala Ser Trp Pro Phe
 35 40 45

Ser Asp Pro Ala Leu Ala Ala Asp Leu Leu Gly Ser Cys Gly Leu Ile
 50 55 60

Cys Gly Pro Cys Xaa Ser Val Ser Phe Ser Ser Pro Val Leu Pro Thr
 65 70 75 80

Pro Leu Pro Asp Gln Arg Pro Asp Pro Gly Glu Arg Met Val Pro Glu
 85 90 95

Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala Leu Leu Trp Phe Pro
 100 105 110

Leu Asp Ser His Ala Arg Ala Arg Pro Asp Met Phe Cys Leu Phe His
 115 120 125

Gly Lys Arg Tyr Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro
 130 135 140

Gln Gly Leu Met Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His
 145 150 155 160

Val Ser Cys Tyr Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro
 165 170 175

Val Thr Glu Pro Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr
 180 185 190

Pro Ser Gly Leu Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr
 195 200 205

Met Tyr Gln His Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser
 210 215 220

Arg Leu Pro Asn Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile
 225 230 235 240

Tyr Cys Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu
 245 250 255

Pro Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu
 260 265 270

Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His

275 280 285
 Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly
 290 295 300
 Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg
 305 310 315 320
 His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu
 325 330 335
 Lys Glu Lys His Xaa Lys Ala Cys Val His Gly Gly Lys Thr Tyr Ser
 340 345 350
 His Gly Glu Val Trp His Pro Ala Phe Arg Ala Phe Gly Pro Cys Pro
 355 360 365
 Cys Ile Leu Cys Thr Cys Glu Asp Gly Arg Gln Asp Cys Gln Arg Val
 370 375 380
 Thr Cys Pro Thr Lys Tyr Pro Cys Arg His Pro Glu Lys Val Ala Gly
 385 390 395 400
 Lys Cys Cys Lys Ile Cys Pro Glu Asp Lys Ala Asp Pro Gly His Ser
 405 410 415
 Glu Ile Ser Ser Thr Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val
 420 425 430
 His Thr Ser Val Ser Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu
 435 440 445
 Glu His Glu Ala Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val
 450 455 460
 Lys Asp Glu Glu Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg
 465 470 475 480
 Pro His Ser Gln Asn Phe His Leu Thr Gln Ile Lys Lys Val Arg Lys
 485 490 495
 Gln Asp Phe Gln Lys Glu Ala Gln His Phe Arg Leu Leu Ala Gly Pro
 500 505 510
 His Glu Gly His Trp Asn Val Phe Leu Ala Gln Thr Leu Glu Leu Lys
 515 520 525
 Val Thr Ala Ser Pro Asp Lys Val Thr Lys Thr
 530 535

<210> 14
 <211> 388
 <212> PRT
 <213> Homo sapiens

<400> 14
 Ile Ser Ser Trp Gly Gln Met Gln Asn His Gln Lys Ser Gly Leu Val
 1 5 10 15

Asn Phe Ser Lys Asp Ser His Glu Thr Ser Phe Ser Ser Ser Ser Cys

20										25										30														
Pro	Ser	Pro	Thr	Val	Glu	Pro	His	Thr	Pro	Ser	Gly	Leu	Arg	Ala	Pro																			
		35					40					45																						
Pro	Lys	Ser	Cys	Gln	His	Asn	Gly	Thr	Met	Tyr	Gln	His	Gly	Glu	Ile																			
	50					55					60																							
Phe	Ser	Ala	His	Glu	Leu	Phe	Pro	Ser	Arg	Leu	Pro	Asn	Gln	Cys	Val																			
	65				70					75					80																			
Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys	Gly	Leu	Thr	Thr	Cys																			
				85					90					95																				
Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro	Leu	Pro	Asp	Ser	Cys	Cys																			
			100					105					110																					
Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu	Gln	Ser	Asp	Glu	Glu	Asp	Ser																			
		115					120					125																						
Val	Gln	Ser	Leu	His	Gly	Val	Arg	His	Pro	Gln	Asp	Pro	Cys	Ser	Ser																			
	130					135					140																							
Asp	Ala	Gly	Arg	Lys	Arg	Gly	Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu																			
	145				150					155					160																			
Ser	Ala	Pro	Leu	Ser	Phe	Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala																			
				165				170						175																				
Gly	Ser	Thr	Thr	Val	Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Xaa	Lys	Ala																			
			180				185						190																					
Cys	Val	His	Gly	Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro																			
		195					200					205																						
Ala	Phe	Arg	Ala	Phe	Gly	Pro	Cys	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu																			
		210				215					220																							
Asp	Gly	Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Lys	Tyr	Pro																			
	225				230					235					240																			
Cys	Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro																			
				245					250					255																				
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg	Cys																			
			260				265						270																					
Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser	Pro	Ser																			
		275					280						285																					
Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala	Ser	Asp	Leu																			
		290				295					300																							
Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu	Glu	Thr	Glu	Ala																			
	305				310					315					320																			
Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His	Ser	Gln	Asn	Phe	His																			
				325					330					335																				
Leu	Thr	Gln	Ile	Lys	Lys	Val	Arg	Lys	Gln	Asp	Phe	Gln	Lys	Glu	Ala																			
			340					345					350																					

Gln His Phe Arg Leu Leu Ala Gly Pro His Glu Gly His Trp Asn Val
 355 360 365

Phe Leu Ala Gln Thr Leu Glu Leu Lys Val Thr Ala Ser Pro Asp Lys
 370 375 380

Val Thr Lys Thr
 385

<210> 15
 <211> 439
 <212> PRT
 <213> Homo sapiens

<400> 15
 Asp Arg Val Phe Gly Leu Glu Pro Pro Gly Thr Asn Met Ala Leu Val
 1 5 10 15

Gly Leu Pro Gly Pro Asp Met Phe Cys Leu Phe His Gly Lys Arg Tyr
 20 25 30

Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met
 35 40 45

Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr
 50 55 60

Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro
 65 70 75 80

Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu
 85 90 95

Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 100 105 110

Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn
 115 120 125

Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu
 130 135 140

Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp
 145 150 155 160

Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu
 165 170 175

Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro
 180 185 190

Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro
 195 200 205

Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro
 210 215 220

Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His
 225 230 235 240

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<210> 16
<211> 549
<212> PRT
<213> Homo sapiens
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Thr	Phe	Pro	Leu	Ser	Leu	Ile	Ala	Ser	Pro	Phe	Cys	Trp	Thr	Phe	Leu
1				5					10					15	
Arg	Leu	Ser	Ile	Ser	Pro	Ser	Phe	Pro	Arg	Val	Leu	Phe	Pro	Pro	Phe
			20					25					30		
Ser	Ser	Ser	His	Leu	Arg	Pro	Pro	Phe	Leu	Pro	Ser	Phe	Pro	Ala	His
		35					40					45			
Arg	Cys	Phe	Leu	Ala	Leu	Leu	Arg	Pro	Arg	Ser	Ser	Ser	Arg	Pro	Pro
	50					55					60				
Gly	Val	Cys	Gly	Leu	Ile	Cys	Gly	Pro	Cys	Ala	Ser	Val	Ser	Phe	Ser
65				70					75					80	

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Ser Pro Phe Leu Pro Thr Pro Leu Pro Asp Gln Arg Pro Asp Pro Gly
      85                      90                      95

Glu Arg Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu
      100                      105                      110

Ala Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
      115                      120                      125

Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser Trp
      130                      135                      140

His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg Cys Thr
      145                      150                      155                      160

Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His Cys Pro Pro
      165                      170                      175

Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln Cys Cys Pro Lys
      180                      185                      190

Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg Ala Pro Pro Lys Ser
      195                      200                      205

Cys Gln His Asn Gly Thr Met Tyr Gln His Gly Glu Ile Phe Ser Ala
      210                      215                      220

His Glu Leu Phe Pro Ser Arg Leu Pro Asn Gln Cys Val Leu Cys Ser
      225                      230                      235                      240

Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys Pro Glu Pro
      245                      250                      255

Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp Ser Cys Cys Gln Ala Cys
      260                      265                      270

Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu Glu Asp Arg Val Gln Ser
      275                      280                      285

Leu His Gly Val Arg His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly
      290                      295                      300

Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro
      305                      310                      315                      320

Leu Ser Phe Ile Pro Arg His Phe Ile Pro Lys Gly Ala Gly Ser Thr
      325                      330                      335

Thr Val Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His
      340                      345                      350

Gly Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg
      355                      360                      365

Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly Arg
      370                      375                      380

Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys Arg His
      385                      390                      395                      400

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Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro Glu Asp Lys
 405 410 415
 Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg Cys Pro Lys Ala
 420 425 430
 Pro Gly Arg Val Leu Val His Thr Ser Val Ser Pro Ser Pro Asp Asn
 435 440 445
 Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser Asp Leu Val Glu Ile
 450 455 460
 Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr Glu Ala Gln Arg Gly
 465 470 475 480
 Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn Leu Pro Leu Asp Ser
 485 490 495
 Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro Glu Arg Gly Thr Ala Leu
 500 505 510
 Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser
 515 520 525
 Pro Asp Pro Gly Ala Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln
 530 535 540
 Asp Ile Thr Lys Thr
 545

<210> 17
 <211> 549
 <212> PRT
 <213> Homo sapiens

<400> 17
 Thr Phe Pro Leu Ser Leu Ile Ala Ser Pro Phe Cys Trp Thr Phe Leu
 1 5 10 15
 Arg Leu Ser Ile Ser Pro Ser Phe Pro Arg Val Leu Phe Pro Pro Phe
 20 25 30
 Ser Ser Ser His Leu Arg Pro Pro Phe Leu Pro Ser Phe Pro Ala His
 35 40 45
 Arg Cys Phe Leu Ala Leu Leu Arg Pro Arg Ser Ser Ser Arg Pro Pro
 50 55 60
 Gly Val Cys Gly Leu Ile Cys Gly Pro Cys Ala Ser Val Ser Phe Ser
 65 70 75 80
 Ser Pro Phe Leu Pro Thr Pro Leu Pro Asp Gln Arg Pro Asp Pro Gly
 85 90 95
 Glu Arg Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu
 100 105 110
 Ala Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
 115 120 125

Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser Trp
 130 135 140
 His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg Cys Thr
 145 150 155 160
 Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His Cys Pro Pro
 165 170 175
 Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln Cys Cys Pro Lys
 180 185 190
 Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg Ala Pro Pro Lys Ser
 195 200 205
 Cys Gln His Asn Gly Thr Met Tyr Gln His Gly Glu Ile Phe Ser Ala
 210 215 220
 His Glu Leu Phe Pro Ser Arg Leu Pro Asn Gln Cys Val Leu Cys Ser
 225 230 235 240
 Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys Pro Glu Pro
 245 250 255
 Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp Ser Cys Cys Gln Ala Cys
 260 265 270
 Lys Gly Glu Ala Ser Glu Gln Ser Asp Glu Glu Asp Ser Val Gln Ser
 275 280 285
 Leu His Gly Val Arg His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly
 290 295 300
 Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro
 305 310 315 320
 Leu Ser Phe Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr
 325 330 335
 Thr Val Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His
 340 345 350
 Gly Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg
 355 360 365
 Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly Arg
 370 375 380
 Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys Arg His
 385 390 395 400
 Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro Glu Asp Lys
 405 410 415
 Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg Cys Pro Lys Ala
 420 425 430
 Pro Gly Arg Val Leu Val His Thr Ser Val Ser Pro Ser Pro Asp Asn
 435 440 445
 Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser Asp Leu Val Glu Ile

450 455 460
 Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr Glu Ala Gln Arg Gly
 465 470 475 480
 Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn Leu Pro Leu Asp Ser
 485 490 495
 Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro Glu Arg Gly Thr Ala Leu
 500 505 510
 Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser
 515 520 525
 Pro Asp Pro Gly Ala Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln
 530 535 540
 Asp Ile Thr Lys Thr
 545

<210> 18
 <211> 392
 <212> PRT
 <213> Homo sapiens

<400> 18
 Ile Ser Ser Trp Gly Gln Met Gln Asn His Gln Lys Ser Gly Leu Val
 1 5 10 15
 Asn Phe Ser Lys Asp Ser His Glu Thr Ser Phe Ser Ser Ser Ser Cys
 20 25 30
 Pro Ser Pro Thr Ala Glu Pro His Thr Pro Ser Gly Leu Arg Ala Pro
 35 40 45
 Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His Gly Glu Ile
 50 55 60
 Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn Gln Cys Val
 65 70 75 80
 Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu Thr Thr Cys
 85 90 95
 Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp Ser Cys Cys
 100 105 110
 Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu Glu Asp Ser
 115 120 125
 Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro Cys Ser Ser
 130 135 140
 Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro Thr Gly Leu
 145 150 155 160
 Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro Lys Gly Ala
 165 170 175
 Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala

180 185 190
 Cys Val His Gly Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro
 195 200 205
 Ala Phe Arg Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu
 210 215 220
 Asp Gly Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro
 225 230 235 240
 Cys Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro
 245 250 255
 Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg Cys
 260 265 270
 Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser Pro Ser
 275 280 285
 Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser Asp Leu
 290 295 300
 Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr Glu Ala
 305 310 315 320
 Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn Leu Pro
 325 330 335
 Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro Glu Arg Gly
 340 345 350
 Thr Ala Leu Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser Leu Glu Arg
 355 360 365
 Leu Pro Ser Pro Asp Pro Gly Ala Glu Gly His Gly Gln Ser Arg Gln
 370 375 380
 Ser Asp Gln Asp Ile Thr Lys Thr
 385 390

 <210> 19
 <211> 443
 <212> PRT
 <213> Homo sapiens

 <400> 19
 Asp Arg Val Phe Gly Leu Glu Pro Pro Gly Thr Asn Met Ala Leu Val
 1 5 10 15
 Gly Leu Pro Gly Pro Asp Met Phe Cys Leu Phe His Gly Lys Arg Tyr
 20 25 30
 Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met
 35 40 45
 Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr
 50 55 60
 Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro

65		70		75		80
Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu	85		90		95	
Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His	100		105		110	
Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn	115		120		125	
Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu	130		135		140	
Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp	145		150		155	160
Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu	165		170		175	
Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro	180		185		190	
Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro	195		200		205	
Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro	210		215		220	
Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His	225		230		235	240
Lys Lys Ala Cys Val His Gly Gly Lys Thr Tyr Ser His Gly Glu Val	245		250		255	
Trp His Pro Ala Phe Arg Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys	260		265		270	
Thr Cys Glu Asp Gly Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr	275		280		285	
Glu Tyr Pro Cys Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys	290		295		300	
Ile Cys Pro Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser	305		310		315	320
Thr Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val	325		330		335	
Ser Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala	340		345		350	
Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu	355		360		365	
Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His Ser Gln	370		375		380	
Asn Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro	385		390		395	400

Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser
 405 410 415
 Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala Glu Gly His Gly Gln
 420 425 430
 Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys Thr
 435 440

 <210> 20
 <211> 378
 <212> PRT
 <213> Homo sapiens

 <400> 20
 Asp Arg Val Phe Gly Leu Glu Pro Pro Gly Thr Asn Met Ala Leu Val
 1 5 10 15
 Gly Leu Pro Gly Pro Asp Met Phe Cys Leu Phe His Gly Lys Arg Tyr
 20 25 30
 Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met
 35 40 45
 Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr
 50 55 60
 Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro
 65 70 75 80
 Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu
 85 90 95
 Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 100 105 110
 Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn
 115 120 125
 Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu
 130 135 140
 Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp
 145 150 155 160
 Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu
 165 170 175
 Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro
 180 185 190
 Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro
 195 200 205
 Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro
 210 215 220
 Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His
 225 230 235 240

Lys Lys Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr
 245 250 255
 Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser
 260 265 270
 Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser
 275 280 285
 Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu Glu Thr
 290 295 300
 Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His Ser Gln Asn
 305 310 315 320
 Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala Arg Leu Pro Glu
 325 330 335
 Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro Pro Arg Arg Ser Leu
 340 345 350
 Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala Glu Gly His Gly Gln Ser
 355 360 365
 Arg Gln Ser Asp Gln Asp Ile Thr Lys Thr
 370 375

<210> 21
 <211> 356
 <212> PRT
 <213> Homo sapiens

<400> 21
 Asp Arg Val Phe Gly Leu Glu Pro Pro Gly Thr Asn Met Ala Leu Val
 1 5 10 15
 Gly Leu Pro Gly Pro Asp Met Phe Cys Leu Phe His Gly Lys Arg Tyr
 20 25 30
 Ser Pro Gly Glu Ser Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met
 35 40 45
 Tyr Cys Leu Arg Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr
 50 55 60
 Arg Leu His Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro
 65 70 75 80
 Gln Gln Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu
 85 90 95
 Arg Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 100 105 110
 Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro Asn
 115 120 125
 Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys Gly Leu
 130 135 140

Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro Leu Pro Asp
 145 150 155 160
 Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu Gln Ser Asp Glu
 165 170 175
 Glu Asp Ser Val Gln Ser Leu His Gly Val Arg His Pro Gln Asp Pro
 180 185 190
 Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly Pro Gly Thr Pro Ala Pro
 195 200 205
 Thr Gly Leu Ser Ala Pro Leu Ser Phe Ile Pro Arg His Phe Arg Pro
 210 215 220
 Lys Gly Ala Gly Ser Thr Thr Val Lys Ile Val Leu Lys Glu Lys His
 225 230 235 240
 Lys Lys Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr
 245 250 255
 Arg Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser
 260 265 270
 Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala Ser
 275 280 285
 Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Gly Ile Phe His
 290 295 300
 Leu Thr Gln Ile Lys Lys Val Arg Lys Gln Asp Phe Gln Lys Glu Ala
 305 310 315 320
 Gln His Phe Arg Leu Leu Ala Gly Pro His Glu Gly His Trp Asn Val
 325 330 335
 Phe Leu Ala Gln Thr Leu Glu Leu Lys Val Thr Ala Ser Pro Asp Lys
 340 345 350
 Val Thr Lys Thr
 355

<210> 22
 <211> 397
 <212> PRT
 <213> Mouse

<400> 22
 Phe Leu Tyr Ser Ser His Thr Ala Leu Pro Thr His Thr Ser Pro Lys
 1 5 10 15
 Val Xaa Glu Ser Pro Gly Gly Trp Leu Ala Lys Ser Leu Ser Val Xaa
 20 25 30
 Leu Leu Ile Ser Leu Arg Ile Ser Thr Ser Pro Thr Arg Phe Cys Val
 35 40 45
 Glu Pro Val Leu Ser Val Cys Leu Ser Val Cys Leu Ser Val Cys Leu
 50 55 60

Ser Ala Cys Leu Ser Leu Ser Val Ser Val Cys Leu Cys Leu Ser Val
 65 70 75 80
 Cys Leu Cys Leu Ser Leu Ser Leu Cys Leu Ser Leu Cys Leu Cys Leu
 85 90 95
 Cys Leu Cys Leu Ser Leu Ser Leu Arg Ser Pro Leu Ala Phe Ser Ser
 100 105 110
 Arg Arg Leu Met Gln Pro Gly Trp Cys Ser Gln Leu Trp Pro Ile Pro
 115 120 125
 Gln Thr Ala Pro His Pro Ala Cys Cys Ser Gln Arg His Ser Gln Asp
 130 135 140
 Pro Cys Ser Glu Arg Arg Gly Pro Ser Thr Pro Ala Pro Thr Ser Leu
 145 150 155 160
 Ser Ser Pro Leu Gly Phe Ile Xaa Arg His Phe Gln Ser Val Gly Met
 165 170 175
 Gly Ser Thr Thr Ile Lys Ile Ile Leu Lys Glu Lys His Lys Lys Ala
 180 185 190
 Cys Thr His Asn Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro
 195 200 205
 Thr Val Leu Ser Phe Gly Pro Met Pro Cys Ile Leu Cys Thr Cys Ile
 210 215 220
 Asp Gly Tyr Gln Asp Cys His Arg Val Thr Cys Pro Thr Gln Tyr Pro
 225 230 235 240
 Cys Ser Gln Pro Lys Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro
 245 250 255
 Glu Asp Glu Ala Glu Asp Asp His Ser Glu Val Ile Ser Thr Arg Cys
 260 265 270
 Pro Lys Val Pro Gly Gln Phe Gln Val Tyr Thr Leu Ala Ser Pro Ser
 275 280 285
 Pro Asp Ser Leu His Arg Phe Val Leu Glu His Glu Ala Ser Asp Gln
 290 295 300
 Val Glu Met Tyr Ile Trp Lys Leu Val Lys Gly Ile Tyr His Leu Val
 305 310 315 320
 Gln Ile Lys Arg Val Arg Lys Gln Asp Phe Gln Lys Glu Val Gln Asn
 325 330 335
 Phe Arg Leu Leu Thr Gly Thr His Glu Gly Tyr Trp Thr Val Phe Leu
 340 345 350
 Ala Gln Ile Pro Glu Leu Lys Val Thr Ala Ser Pro Asp Lys Val Thr
 355 360 365
 Lys Thr Leu Gln Gly Pro Lys Glu Leu Gln Ile Arg Val Leu Leu Val
 370 375 380

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Leu Leu Leu Tyr Ile Asn Lys Glu Val Ala Leu Pro Phe
335 390 395